

Remarks/Arguments

The Office Action mailed on May 28, 2008 and the Decision on Appeal mailed on August 3, 2011 have been reviewed and carefully considered.

Claims 1, 3-12 and 14-16 and 18-22 are now pending in this application. Claim 13 was previously canceled. New claim 22 has been added to replace claim 13. Claims 2 and 17 have been canceled. Claims 1, 5, 6, 9, 14 and 16 have been amended.

Reconsideration of the above-identified application, in view of the following Remarks, is respectfully requested.

Amended independent claim 1 now recites:

“A method, comprising:

scanning to detect a presence of a wireless local area network;
detecting the presence of said wireless local area network;
determining a media access control identification of a base station of said wireless local area network;
receiving a location of said base station through said wireless local area network; and
logging the media access control identification of said base station and the received location.”

Support for the amendments to independent claims 1, 9 and 16 can be found in the specification at Page 4, lines 9-19:

“Instead of contacting the base station to set up an actual connection, the mobile device will merely request that the base station send it a message containing the physical address of the base station. For example, the base station might send the device something like “Starbucks 731 5th Avenue, Manhattan, NY, USA”. The device would then log this address in a database in its memory 1101. If the mobile device

detects the base station's beacon and realizes that it is from a base station with a media access control identification MAC ID (a unique hardware identifier) that is already in the database, it will not query the base station since it already knows its location. Not querying base stations that are already in the locations database will reduce network traffic."

The mobile device determines the media access control identification and receives the location of a base station through the wireless local access network. The mobile device then logs the location and media access control identification of the base station in its database in order to determine if a detected MAC ID of a base station is already in the database. This permits the mobile device to not request the location from the base station in the future, saving bandwidth and power.

Rejections under 35 U.S.C. §103(a)

Claims 1-4, 6-7, 9-12 and 15-21 currently stand rejected under 35 U.S.C. §103(a) in view of U.S. Patent Publication 2004/0205158 (hereinafter 'Hsu'), purportedly admitted prior art (hereinafter 'PAPA'), "Clock Solutions for WiFi (IEEE 802.11)" by Brandon Ogilvie (hereinafter 'Ogilvie') and U.S. Patent No. 7,110,783 to Bahl et al. (hereinafter 'Bahl').

Claim 5, currently stand rejected under 35 U.S.C. §103(a) in view of Hsu over-AAPA and further in view of Rao (US 2004/0264395).

Claims 8 and 14 currently stand rejected under 35 U.S.C. §103(a) in view of Hsu over-AAPA and further in view of Sundar et al. (US 2003/0134650).

Applicant respectfully requests reconsideration of the Examiner's §103(a) rejections in light of the following comments and amendments.

Remarks on Hsu

The Examiner has previously cited Hsu paragraphs [0046], [0050] and [0052] as disclosing the feature of receiving location information from a base station of a wireless local area network as found in independent claims 1, 9 and 16. Hsu attempts "to minimize unnecessary WLAN scanning based on WLAN advertisements from the cellular network..."

(see, Hsu paragraph [0037]). “Once the MS has the necessary WLAN information, the MS determines when to scan for WLAN information” (Hsu paragraph [0040]). Thus, Hsu uses cell sector information to determine what WLANs are available in that cell sector and sends the WLAN availability to the MS over the cellular network. There seems to be some confusion over the term “base station.” The BS (base station) and BSC (Base Station Controller) in Hsu are not base stations of a wireless local area network (WLAN). They are base stations of a cellular network (cell towers, etc). FIG. 2A of Hsu illustrates the cell sectors of the cellular network. Hsu provides WLAN information to a mobile station (MS) over the cellular network when WLAN information is available for the cell sector that the MS is operating in. Fig. 2B shows the BS communicating with the MS. See, for example, paragraph [0056] of Hsu (“MS sends a registration request to the BS (i.e., cellular network)”). Thus, Hsu does not disclose this feature of independent claims 1, 9 and 16.

Additionally, Hsu does not disclose the features of determining and logging *a media access identification of a base station of a wireless local access network* as found in independent claims 1, 9 and 16. Hsu relies on information provided by a cellular network to determine locations of its WLANs. There is no need for Hsu to determine a location of a base station of a wireless local access network let alone a media access control identification of the WLAN’s base station.

Remarks on Hsu in view of Rao

The Examiner has also cited Hsu in view of Rao to make up for some of the shortcomings of Hsu, namely that of storing a MAC address for a detected WLAN. Rao is directed to “Configuration of a wireless network client to access an appropriate wireless access point in a network environment wherein the configuration includes discovering a wireless local network identity of each wireless access point in the network environment...” (see, abstract). However, Rao never discloses associating a location obtained from a base station of a wireless local area network with a media access control identification as found in independent claims 1, 9 and 16. Discovery of wireless access points of a given network for configuration purposes is the goal of Rao. There is no need in Rao to determine a location of a base station of a WLAN.

Applicant Submitted Reference - Eaton

Applicant has submitted a reference, Eaton et al. US 2003/0058808, along with this office action reply for consideration by the Examiner.

Eaton operates with a smart network access point (SNAP) that has very unique properties for a network access point (e.g., storing of location data internal to the SNAP, some with embedded GPS circuitry, etc.). Eaton teaches that location information is stored on the SNAP and can be passed to a mobile device after completion of the authorization step of the discovery process. Thus, Eaton interacts correctly only with a specialized access point (i.e., SNAP). Eaton does not disclose the feature of scanning for these specialized access points at all as found in independent claims 1, 9 and 16 - “*scanning to detect a presence of a wireless local area network.*”

Eaton also does not teach determining and logging of a media access control identification and its location as found in independent claims 1, 9 and 16. Claims 1, 9 and 16 log a media access control identification of a base station and its location for future reference. This permits location determination of a known base station without requiring a connection with the base station. This is in *significant* contrast to techniques such as that found in Eaton. Eaton requires that the device makes a discovery connection with a SNAP in order to receive location information from the SNAP (see, e.g., paragraphs [0048], [0057], [0060], and [0065]; also Figs. 4, 5 and 6). Eaton does this for every SNAP that it comes into contact with as it is in motion – Paragraph [0037] – “utilizes the location data such as location coordinates received from each smart network access point he passes while in motion...” Contacting each SNAP and establishing a connection uses significantly more battery power than that used by passively receiving the base station’s media access control identification. If the user is frequenting a large airport with many base stations, the mobile device’s battery power will be drained by the constant connections even though the user has already been in the airport and passed the same known base stations many times before.

Additionally, establishing a connection with a network requires handshaking. If that handshaking fails for any reason, Eaton will not receive any location information. In Eaton, if the mobile device is not permitted to make a connection with a SNAP, no location information is obtained from the SNAP (see, e.g., block 168 of Fig. 4 - [0057], Fig. 5 [0060] and Fig. 6 – [0065]) – e.g., “Next in Step 168, the process determines whether the portable

device 100 is allowed on the short range WLAN 114. When the portable device 100 is not allowed on the short range WLAN 114, the process stops.”

Thus, logging the media access control identification with a location of a base station as found in claims 1, 9 and 16 has significant advantages over techniques such as that found in Eaton – including significantly less power drain on the mobile device and the ability to determine a location without making a connection with a known base station.

In light of all of the above comments, independent claims 1, 9 and 16 and their dependent claims 3-8, 10-15, 18-22 are believed to be in condition for allowance at least because Hsu, Rao, and Eaton, taken singly or in combination, fail to disclose or render obvious the features of independent claims 1, 9 and 16. Applicants request that the rejections be withdrawn and that all claims be allowed to issue.

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Conclusion

In view of the foregoing, Applicant respectfully requests that the rejections of the claims set forth in the Final Office Action of dated May 28, 2008 be withdrawn, that pending claims 1, 3-12 and 14-16 and 18-22 be allowed, and that the case proceed to early issuance of Letters Patent in due course.

It is believed that no additional fees or charges are currently due. However, in the event that any additional fees or charges are required at this time in connection with the application, they may be charged to Applicant's representatives Deposit Account No. 07-0832.

Respectfully submitted,
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